X

1642 1600 #16 DmT

CRF Errors Corrected by th STIC Syst ms Branch

Serial Number: 09/615,285B ENTERED

CRF Processing Date: 7/17/2002 7-22-02
Edited by:
Verified by: (STIC staff)

RECEIVED JUL 15 2002 TECH CENTER 1600/2900

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☑ Deleted: ☑ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ***ending*** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

***Examiner: The abov corrections must b communicated to the applicant in the first Offic Action. DO NOT send a copy of this form.**

3/1/95

RAW SEQUENCE LISTING DATE: 07/11/2002
PATENT APPLICATION: US/09/615,285B TIME: 08:08:00

Input Set : N:\AMC\51158-20008.txt
Output Set: N:\CRF3\07112002\I615285B.raw

p.6

```
 4 <110> APPLICANT: Afar, Daniel E. H.
 5       Hubert, Rene S.
 6       Leong, Kahan
 7       Raitano, Arthur B.
 8       Saffran, Douglas C.
 9       Mitchell, Stephen C.
10       Jakobovits, Aya
11       Faris, Mary
12       Vivanco, Igo
14 <120> TITLE OF INVENTION: NOVEL TUMOR ANTIGEN USEFUL IN DIAGNOSIS
15       AND THERAPY OF PROSTATE AND COLON CANCER
18 <130> FILE REFERENCE: 511582000820
20 <140> CURRENT APPLICATION NUMBER: 09/615,285B
C--> 21 <141> CURRENT FILING DATE: 2002-06-20
23 <150> PRIOR APPLICATION NUMBER: 09/323,597
24 <151> PRIOR FILING DATE: 1999-06-01
26 <150> PRIOR APPLICATION NUMBER: 60/087,598
27 <151> PRIOR FILING DATE: 1998-06-01
29 <150> PRIOR APPLICATION NUMBER: 60/091,474
30 <151> PRIOR FILING DATE: 1998-06-29
32 <150> PRIOR APPLICATION NUMBER: 60/129,521
33 <151> PRIOR FILING DATE: 1999-04-14
35 <160> NUMBER OF SEQ ID NOS: 43
37 <170> SOFTWARE: FastSEQ for Windows Version 4.0
39 <210> SEQ ID NO: 1
40 <211> LENGTH: 1738
41 <212> TYPE: DNA
42 <213> ORGANISM: Homo sapiens
44 <220> FEATURE:
45 <221> NAME/KEY: CDS
46 <222> LOCATION: (112)...(1588)
48 <400> SEQUENCE: 1
49 ggcggaggcg gaggcggagg gcgaggggcg gggagcgccg cctggagcgc ggcaggtcat     60
50 attgaacatt ccagatacct atcattactc gatgctgttg ataacagcaa g atg gct     117
51                                                          Met Ala
52                                                           1
54 ttg aac tca ggg tca cca cca gct att gga cct tac tat gaa aac cat      165
55 Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu Asn His
56          5                  10                  15
58 gga tac caa ccg gaa aac ccc tat ccc gca cag ccc act gtg gtc ccc      213
59 Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val Val Pro
60      20                  25                  30
62 act gtc tac gag gtg cat ccg gct cag tac tac ccg tcc ccc gtg ccc      261
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RAW SEQUENCE LISTING DATE: 07/11/2002
PATENT APPLICATION: US/09/615,285B TIME: 08:08:00

Input Set : N:\AMC\51158-20008.txt
Output Set: N:\CRF3\07112002\I615285B.raw

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63 Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro Val Pro
64  35                  40                  45                  50
66 cag tac gcc ccg agg gtc ctg acg cag gct tcc aac ccc gtc gtc tgc      309
67 Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val Val Cys
68                  55                  60                  65
70 acg cag ccc aaa tcc cca tcc ggg aca gtg tgc acc tca aag act aag      357
71 Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys Thr Lys
72              70                  75                  80
74 aaa gca ctg tgc atc acc ttg acc ctg ggg acc ttc ctc gtg gga gct      405
75 Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val Gly Ala
76          85                  90                  95
78 gcg ctg gcc gct ggc cta ctc tgg aag ttc atg ggc agc aag tgc tcc      453
79 Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys Cys Ser
80      100                 105                 110
82 aac tct ggg ata gag tgc gac tcc tca ggt acc tgc atc aac ccc tct      501
83 Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn Pro Ser
84 115                 120                 125                 130
86 aac tgg tgt gat ggc gtg tca cac tgc ccc ggc ggg gag gac gag aat      549
87 Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn
88                  135                 140                 145
90 cgg tgt gtt cgc ctc tac gga cca aac ttc atc ctt cag gtg tac tca      597
91 Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Val Tyr Ser
92              150                 155                 160
94 tct cag agg aag tcc tgg cac cct gtg tgc caa gac gac tgg aac gag      645
95 Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu
96          165                 170                 175
98 aac tac ggg cgg gcg gcc tgc agg gac atg ggc tat aag aat aat ttt      693
99 Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe
100     180                 185                 190
102 tac tct agc caa gga ata gtg gat gac agc gga tcc acc agc ttt atg      741
103 Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met
104 195                 200                 205                 210
106 aaa ctg aac aca agt gcc ggc aat gtc gat atc tat aaa aaa ctg tac      789
107 Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu Tyr
108                 215                 220                 225
110 cac agt gat gcc tgt tct tca aaa gca gtg gtt tct tta cgc tgt ata      837
111 His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg Cys Ile
112             230                 235                 240
114 gcc tgc ggg gtc aac ttg aac tca agc cgc cag agc agg att gtg ggc      885
115 Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile Val Gly
116         245                 250                 255
118 ggc gag agc gcg ctc ccg ggg gcc tgg ccc tgg cag gtc agc ctg cac      933
119 Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His
120     260                 265                 270
122 gtc cag aac gtc cac gtg tgc gga ggc tcc atc atc acc ccc gag tgg      981
123 Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp
124 275                 280                 285                 290
126 atc gtg aca gcc gcc cac tgc gtg gaa aaa cct ctt aac aat cca tgg     1029
127 Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp
```

RAW SEQUENCE LISTING DATE: 07/11/2002
PATENT APPLICATION: US/09/615,285B TIME: 08:08:00

Input Set : N:\AMC\51158-20008.txt
Output Set: N:\CRF3\07112002\I615285B.raw

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128                 295                 300                 305
130 cat tgg acg gca ttt gcg ggg att ttg aga caa tct ttc atg ttc tat     1077
131 His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met Phe Tyr
132             310                 315                 320
134 gga gcc gga tac caa gta gaa aaa gtg att tct cat cca aat tat gac     1125
135 Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn Tyr Asp
136         325                 330                 335
138 tcc aag acc aag aac aat gac att gcg ctg atg aag ctg cag aag cct     1173
139 Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro
140     340                 345                 350
142 ctg act ttc aac gac cta gtg aaa cca gtg tgt ctg ccc aac cca ggc     1221
143 Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly
144 355                 360                 365                 370
146 atg atg ctg cag cca gaa cag ctc tgc tgg att tcc ggg tgg ggg gcc     1269
147 Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp Gly Ala
148                 375                 380                 385
150 acc gag gag aaa ggg aag acc tca gaa gtg ctg aac gct gcc aag gtg     1317
151 Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala Lys Val
152             390                 395                 400
154 ctt ctc att gag aca cag aga tgc aac agc aga tat gtc tat gac aac     1365
155 Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr Asp Asn
156         405                 410                 415
158 ctg atc aca cca gcc atg atc tgt gcc ggc ttc ctg cag ggg aac gtc     1413
159 Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly Asn Val
160     420                 425                 430
162 gat tct tgc cag ggt gac agt gga ggg cct ctg gtc act tcg aag aac     1461
163 Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Lys Asn
164 435                 440                 445                 450
166 aat atc tgg tgg ctg ata ggg gat aca agc tgg ggt tct ggc tgt gcc     1509
167 Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys Ala
168                 455                 460                 465
170 aaa gct tac aga cca gga gtg tac ggg aat gtg atg gta ttc acg gac     1557
171 Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe Thr Asp
172             470                 475                 480
174 tgg att tat cga caa atg agg gca gac ggc t aatccacatg gtcttcgtcc     1608
175 Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly
176         485                 490
178 ttgacgtcgt tttacaagaa aacaatgggg ctggttttgc ttccccgtgc atgatttact   1668
179 cttagagatg attcagaggt cacttcattt ttattaaaca gtgaacttgt ctggcaaaaa   1728
180 aaaaaaaaaa                                                        1738
182 <210> SEQ ID NO: 2
183 <211> LENGTH: 492
184 <212> TYPE: PRT
185 <213> ORGANISM: Homo sapiens
187 <400> SEQUENCE: 2
188 Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
189  1               5                  10                  15
190 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
191             20                  25                  30
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RAW SEQUENCE LISTING DATE: 07/11/2002
PATENT APPLICATION: US/09/615,285B TIME: 08:08:00

Input Set : N:\AMC\51158-20008.txt
Output Set: N:\CRF3\07112002\I615285B.raw

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192 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
193         35                  40                  45
194 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
195     50                  55                  60
196 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
197 65                  70                  75                  80
198 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
199                 85                  90                  95
200 Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
201             100                 105                 110
202 Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
203         115                 120                 125
204 Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
205     130                 135                 140
206 Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Val
207 145                 150                 155                 160
208 Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
209                 165                 170                 175
210 Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
211             180                 185                 190
212 Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
213         195                 200                 205
214 Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys
215     210                 215                 220
216 Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg
217 225                 230                 235                 240
218 Cys Ile Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile
219                 245                 250                 255
220 Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser
221             260                 265                 270
222 Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro
223         275                 280                 285
224 Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn
225     290                 295                 300
226 Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met
227 305                 310                 315                 320
228 Phe Tyr Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn
229                 325                 330                 335
230 Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln
231             340                 345                 350
232 Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn
233         355                 360                 365
234 Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp
235     370                 375                 380
236 Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala
237 385                 390                 395                 400
238 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr
239                 405                 410                 415
240 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly
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RAW SEQUENCE LISTING DATE: 07/11/2002
PATENT APPLICATION: US/09/615,285B TIME: 08:08:00

Input Set : N:\AMC\51158-20008.txt
Output Set: N:\CRF3\07112002\I615285B.raw

```
241             420                 425                 430
242 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser
243         435                 440                 445
244 Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly
245     450                 455                 460
246 Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe
247 465                 470                 475                 480
248 Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly
249                 485                 490
251 <210> SEQ ID NO: 3
252 <211> LENGTH: 2479
253 <212> TYPE: DNA
254 <213> ORGANISM: Homo sapiens
256 <220> FEATURE:
257 <221> NAME/KEY: CDS
258 <222> LOCATION: (57)...(1534)
260 <400> SEQUENCE: 3
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262                                                                 Met
263                                                                  1
265 gct ttg aac tca ggg tca cca cca gct att gga cct tac tat gaa aac      107
266 Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu Asn
267              5                  10                  15
269 cat gga tac caa ccg gaa aac ccc tat ccc gca cag ccc act gtg gtc      155
270 His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val Val
271          20                  25                  30
273 ccc act gtc tac gag gtg cat ccg gct cag tac tac ccg tcc ccc gtg      203
274 Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro Val
275      35                  40                  45
277 ccc cag tac gcc ccg agg gtc ctg acg cag gct tcc aac ccc gtc gtc      251
278 Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val Val
279  50                  55                  60                  65
281 tgc acg cag ccc aaa tcc cca tcc ggg aca gtg tgc acc tca aag act      299
282 Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys Thr
283                  70                  75                  80
285 aag aaa gca ctg tgc atc acc ttg acc ctg ggg acc ttc ctc gtg gga      347
286 Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val Gly
287              85                  90                  95
289 gct gcg ctg gcc gct ggc cta ctc tgg aag ttc atg ggc agc aag tgc      395
290 Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys Cys
291          100                 105                 110
293 tcc aac tct ggg ata gag tgc gac tcc tca ggt acc tgc atc aac ccc      443
294 Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn Pro
295      115                 120                 125
297 tct aac tgg tgt gat ggc gtg tca cac tgc ccc ggc ggg gag gac gag      491
298 Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu
299 130                 135                 140                 145
301 aat cgg tgt gtt cgc ctc tac gga cca aac ttc atc ctt cag atg tac      539
302 Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met Tyr
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/11/2002
PATENT APPLICATION: **US/09/615,285B** TIME: 08:08:01

Input Set : **N:\AMC\51158-20008.txt**
Output Set: **N:\CRF3\07112002\I615285B.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 206,274